

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (previously amended) A microwave circuit package comprising:
 - a plurality of fluoropolymer composite substrate layers each substrate layer having a pair of planar surfaces and the plurality of substrate layers being bonded together such that each substrate layer has at least one surface that is adjacent to the surface of another one of the substrate layers;
 - a plurality of metal layers disposed on said surfaces of said plurality of substrate layers;
 - a plurality of groundplanes comprising a first subset of said plurality of metal layers connected by a first plurality of conductors;
 - at least one coupler comprising a plurality of coupling lines, wherein said coupler has a substantially spiral-like shape; and
 - a conductive via passing through at least a pair of substrate layers and through a groundplane positioned between said pair of substrate layers, said conductive via connecting the coupler to signal lines interconnected to signal port terminals, said signal port terminals enabling connection of the coupler to an external signal source;
 - wherein at least two of the substrate layers have different dielectric constants.
2. (original) The microwave circuit of claim 1, wherein said spiral-like shape is substantially circular.

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3. (original) The microwave circuit of claim 1, wherein said spiral-like shape is substantially rectangular.
4. (original) The microwave circuit of claim 1, wherein said spiral-like shape is substantially oval.
5. previously cancelled
6. (original) The microwave circuit of claim 1, wherein said plurality of coupling lines are substantially co-planar.
7. (previously amended) The microwave circuit of claim 1, wherein said plurality of coupling lines are distributed across a plurality of different planes formed by adjacent surfaces of pairs of the substrate layers.
8. (previously amended) The microwave circuit of claim 1, wherein said plurality of coupling lines comprises at least three coupling lines.
9. previously withdrawn
10. (previously amended) The microwave circuit of claim 1, wherein at least one of said plurality of fluoropolymer composite substrate layers is adhered to ceramic.
11. previously cancelled
12. previously withdrawn
13. previously withdrawn
14. previously withdrawn
15. previously withdrawn
16. previously cancelled
17. previously withdrawn
18. previously withdrawn

19. previously withdrawn

20. previously withdrawn

21. previously withdrawn

22. previously withdrawn

23. (previously amended) A microwave circuit comprising:

fluoropolymer composite substrate means for defining substrate layers and substrate layer surfaces;

metal layer means disposed on said surfaces to define a plurality of conducting layers;

grounding means comprising a first subset of said plurality of conducting layers;

coupling lines means comprising a second subset of said plurality of conducting layers for forming a coupler having a substantially spiral-like shape; and

a conductive via comprising a same material composition as comprises said conducting layers, the conductive via interconnecting the coupling line means to a signal port terminal.

24. (original) The microwave circuit of claim 23, wherein said spiral-like shape is substantially circular.

25. (original) The microwave circuit of claim 23, wherein said spiral-like shape is substantially rectangular.

26. (original) The microwave circuit of claim 23, wherein said spiral-like shape is substantially oval.

27. previously cancelled.

28. (original) The microwave circuit of claim 23, wherein said coupling lines means are substantially co-planar.

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29. (original) The microwave circuit of claim 23, wherein said coupling lines means are distributed across a plurality of planes.

30. (original) The microwave circuit of claim 23, wherein said coupling lines means comprises at least three coupling lines.

31. previously cancelled

32. (previously amended) The microwave circuit of claim 23 wherein at least one of said surfaces is adhered to ceramic.

33. previously cancelled

34. (previously amended) A microwave circuit package comprising:

a plurality of fluoropolymer composite substrate layers each substrate layer having a pair of planar surfaces and the plurality of substrate layers being bonded together such that each substrate layer has at least one surface that is adjacent to the surface of another one of the substrate layers;

a plurality of metal layers disposed on said surfaces of said plurality of substrate layers;

a plurality of groundplanes comprising a first subset of said plurality of metal layers connected by a first plurality of conductors;

at least one coupler comprising a plurality of coupling lines, said coupling lines comprising a second subset of said plurality of metal layers, and wherein said coupler has a substantially spiral-like shape; and

a conductive via,

said conductive via passing through at least a pair of substrate layers and through a groundplane positioned between said pair of substrate layers,

said conductive via comprising a same material composition as comprises a metal layer on at least one surface of said pair of substrate layers,

said conductive via connecting the coupler to signal lines interconnected to signal port terminals, and

said signal port terminals enabling connection of the coupler to an external signal source.

35. (previously amended) The microwave circuit of claim 34, wherein at least two of the substrate layers have different dielectric constants.
36. (previously added) The microwave circuit of claim 34, wherein said plurality of coupling lines are substantially co-planar.
37. (previously added) The microwave circuit of claim 34, wherein said plurality of coupling lines are distributed across a plurality of different planes formed by adjacent surfaces of pairs of the substrate layers .
38. (previously added) The microwave circuit of claim 34, wherein said plurality of coupling lines comprises at least three coupling lines.
39. (previously added) The microwave circuit of claim 34, wherein at least one of said plurality of fluoropolymer composite substrate layers is adhered to ceramic.
40. (cancelled)
41. (previously added) The microwave circuit of claim 34 wherein the plurality of groundplanes are disposed over the surface of the substrate layers such that the groundplanes extend over an entire surface of the substrate layers other than in areas of isolation cut-outs that isolate the ground planes from signal port terminal connectors.